

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

Claims 1-54. (previously canceled)

Claim 55. (currently amended) A method of producing a transgenic solanaceous plant, wherein cells of the solanaceous plant have within their genome a chimeric gene, the expression of which gene causes plant cell cytotoxicity by ribosome inactivation at a desired target site within the plant body, comprising

- (i) transforming plant cells with a chimeric gene comprising (a) a promoter, which promoter is induced at and/or adjacent to the target site, operably linked to (b) a nucleic acid molecule which binds to SEQ. ID. No.:2 in 0.5M NaHPO₄, 7% sodium dodecyl sulfate (SDS), 1mm EDTA at 65°C followed by washing in 0.1X SSC, 0.1% SDS at 68 °C, wherein said nucleic acid molecule encodes a mature maize ribosome inactivating protein comprising an α domain and a β domain arranged contiguously and having type 3 ribosome inactivating activity; and
- (ii) the selective expression of the ribosome inactivating protein at the target site for induction of plant cell death at that target site.

Claim 56. (previously presented) A method of producing a transgenic plant according to claim 55, wherein the protein having type 3 ribosome inactivating activity is a mature maize ribosome inactivating protein comprising an α domain and a β domain arranged contiguously.

Claim 57. (currently amended) A method of producing a transformed plant according to claim ~~56~~ 55, wherein the nucleic acid molecule comprises SEQ. ID. No.: 2.

Claim 58. (previously presented) A method of producing a transformed plant according to claim 55, wherein said chimeric gene further comprises a 3' untranslated terminator sequence.

Claim 59. (previously presented) A method of producing a transformed plant according to claim 58, wherein said 3' untranslated terminator sequence is from plant, bacterial or viral genes.

Claim 60. (previously presented) A method of producing a transformed plant according to claim 58, wherein said 3' untranslated terminator sequence is selected from the group consisting of the pea rbcS E9 terminator sequence, the nos terminator sequence derived from the nopaline synthase gene of *Agrobacterium tumefaciens* and the 35S terminator sequence from cauliflower mosaic virus.

Claim 61. (previously presented) A method of producing a transformed plant according to claim 55, wherein said chimeric gene further comprises a transcriptional or translational enhancer sequence intracellular targeting sequences and introns, or nucleotide sequences operable to facilitate the transformation process and stable expression of said chimeric gene or combinations thereof.

Claim 62. (previously presented) A plant transformed with a chimeric gene according to the method of claim 55.

Claim 63. (currently amended) A plant cell comprising within its genome a chimeric gene, the expression of which gene causes plant cytotoxicity, said chimeric gene comprising (i) a promoter, which promoter is induced at and/or adjacent to a target site, operably linked to (ii) a nucleic acid molecule which binds to the nucleic acid molecule of SEQ ID NO.: 2 in 0.5M NaHPO₄, 7% sodium dodecyl sulfate (SDS), 1mM EDTA at 65°C followed by washing in 0.1X SSC, 0.1% SDS at 68 °C, wherein said nucleic acid molecule encodes a mature maize ribosome inactivating protein comprising an α domain and a β domain arranged contiguously and having type 3 ribosome inactivating activity.

Claim 64. (currently amended) A method of producing a transgenic solanaceous plant, comprising growing plants from a seed wherein said seeds have within their genome a chimeric gene, the expression of which gene causes plant cytotoxicity at a target site, said chimeric gene comprising (a) a promoter, which promoter is induced at and/or adjacent to the target site, operably linked to (b) a nucleic acid molecule which binds to SEQ.

ID. No.:2 in 0.5M NaHPO₄, 7% sodium dodecyl sulfate (SDS), 1mm EDTA at 65°C followed by washing in 0.1X SSC, 0.1% SDS at 68 °C, wherein said nucleic acid molecule encodes a protein having type 3 ribosome inactivating activity wherein said nucleic acid molecule encodes a mature maize ribosome inactivating protein comprising an α domain and a β domain arranged contiguously and having type 3 ribosome inactivating activity.

Claim 65. (currently amended) A nucleic acid molecule comprising (a) a promoter, which promoter is induced at and/or adjacent to the target site, operably linked to (b) a nucleic acid molecule which binds to SEQ. ID. No.:2 in 0.5M NaHPO₄, 7% sodium dodecyl sulfate (SDS), 1mm EDTA at 65°C followed by washing in 0.1X SSC, 0.1% SDS at 68 °C, wherein said nucleic acid molecule encodes a protein having type 3 ribosome inactivating activity wherein said nucleic acid molecule encodes a mature maize ribosome inactivating protein comprising an α domain and a β domain arranged contiguously and having type 3 ribosome inactivating activity.

Claim 66. (previously presented) A vector comprising the nucleic acid of claim 65.